Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Topic: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Score: \_\_\_\_\_\_\_\_\_\_/25 pts

**Biology Lab Report Rubric**

**Reports must be typed and printed.** *Due at beginning of class on due date. Each day late = minus one letter grade*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Exemplary | Accomplished | Developing | Beginning | Points |
| **Cover page with title**, name, names of group members, date of Investigation, and due date | * All information is present, consistently formatted, easily understood and aesthetically pleasing * Title clearly explains purpose of the investigation | * All information is present but may not be aesthetically pleasing etc. * Title may not clearly explain purpose of the lab | Some information present | Little to no information present | /1 |
| **Introduction** | * Includes question/purpose of investigation * Provides accurate and sufficient background information which helps reader understand key points of lab (Ex. what do plants need to survive, why choose the independent variable you did) * Accurately describes the variables, constants, and control group(s) of lab | * Includes question/ purpose of investigation * Provides some background information which helps reader understand key points of lab * Describes the variables, constants, and control group(s) of lab | Does not include all three parts in “accomplished” category and/or information is inaccurate, unclear, etc. | Lacking much of the necessary information and/or information in inaccurate, unclear, etc. | /3 |
| **Hypothesis**  Format: *If…[IV changes]…then [DV changes]…because…”.* | Clearly and accurately states relationship between independent and dependent variables AND provides scientific reasoning to support the prediction | States relationship between independent and dependent variables AND provides reasoning to support the prediction | Makes a prediction for what will occur in lab but does not clearly explain relationship between variables and/or provide reasoning | Minimal or nonexistent prediction | /2 |
| **Materials** | ALL materials and quantities of materials listed | Some materials and quantities of materials listed | Less than half of materials and quantities listed | Minimal to no materials and materials listed | /1 |
| **Procedure** | Step-by-step instructions written clearly and concisely so that one could read and duplicate the experiment exactly | Written so that one could read and mostly duplicate the experiment | Written so that one could somewhat duplicate experiment | Vague or unclear. One could not duplicate the experiment. | /3 |
| **Data/Results** | * Quantitative and qualitative data included * Accurate and appropriate data table with title * Accurate and appropriate graph with title, labelled axes, proper intervals * Labelled pictures of results | * Quantitative and qualitative data included * Data table with title * Graph with title, labelled axes, proper intervals | Missing about half of necessary data and/or inaccurate | Little to no data | /4 |
| **Analysis/Discussion** | * Accurately and concisely summarizes data. Describes any trends or patterns (or lack thereof) * Discusses relationship between the results obtained and the hypotheses and the explanations/prior knowledge on which the hypothesis was based. * Possible and known sources of errors explained and improvements suggested. | * Summarizes data. Describes any trends or patterns (or lack thereof) * Discusses relationship between the results obtained and the hypotheses * and known sources of errors explained | Includes some aspects of what is needed in the analysis/discussion section and/or is unclear, wordy, inaccurate, etc. | Includes little of necessary information and/or is unclear, wordy, inaccurate, etc. | /4 |
| **Conclusion** | * States whether or not the hypothesis was supported by the data AND provides data which support statement. * Clearly and accurately connects what was done and observed in the lab to a real-world example | * States whether or not the hypothesis was supported by the data. * Connects what was done and observed in the lab to a real-world example | Includes some aspects of what is needed in the conclusion section and/or is unclear, wordy, inaccurate, etc. | Includes little of necessary information and/or is unclear, wordy, inaccurate, etc. | /4 |
| **Question(s)** for further investigation | Give at least one new experimental question based on this investigation | Provides a questions which may or not be related to lab or be experimental (able to be tested) | Provides a vague, unclear, unrelated or already answered (answer widely known) question | No question provided | /1 |
| **Citations** | ALL sources cited. Any class handouts used must be included. Wikipedia cannot be the only sources – need a credible source too. | Some sources cited |  | No sources cited | /1 |
| **Grammar, punctuation, spelling** | ALL grammar, punctuation, spelling is correct. Subscripts/superscripts used properly (ex. CO2 - not CO2) | Most grammar, punctuation, spelling is correct | Some grammar, punctuation, spelling is correct | Little grammar, punctuation, spelling is correct | /0.5 |
| **Formatting** | Formatting is always consistent (ex. same type and size of font) and aesthetically pleasing | Formatting is mostly consistent (ex. same type and size of font) and aesthetically pleasing | Formatting is somewhat consistent (ex. same type and size of font) and aesthetically pleasing | Formatting is inconsistent (ex. same type and size of font) and aesthetically pleasing | /0.5 |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Topic: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Score: \_\_\_\_\_\_\_\_\_\_/25 pts

**Biology Lab Report Checklist**

**Reports must be typed and printed.**

*Due at beginning of class on due date. Each day late = minus one letter grade*

* **Cover page with title**, name, group members’ names, date of Investigation, and due date **\_\_\_\_\_\_\_/ 1pt**
* **Introduction \_\_\_\_\_\_/3 pts**
* **Hypothesis \_\_\_\_\_\_\_/2 pts**
* **Materials \_\_\_\_\_\_\_/ 1 pt**
* **Procedures \_\_\_\_\_\_\_/ 3 pts**
* **Results/Data \_\_\_\_\_\_\_/ 4 pts**
* **Analysis and Discussion \_\_\_\_\_\_\_ 4 pts**
* **Conclusion \_\_\_\_\_\_\_\_\_\_/4 pts**
* **Question(s)** for further investigation**\_\_\_\_\_/ 1 pt**
* **Sources Cited \_\_\_\_\_/ 1 pt**
* **Grammar, punctuation, spelling correct \_\_\_\_\_\_\_\_\_/ 0.5 pts**
* **Consistent Formatting\_\_\_\_\_/ 0.5 pts**